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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,766	07/10/2003	Larry W. Smith	19316.000202	9461

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EXAMINER	
DONELS, JEFFREY	

ART UNIT	PAPER NUMBER
2837	

DATE MAILED: 11/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/615,766	SMITH, LARRY W.	
	Examiner	Art Unit	
	Jeffrey Donels	2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 September 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,10 and 11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,10 and 11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 10,11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The functionality recited in the most recent amendment to the claims, describing the invention as being "configured" to being able to be placed into a "karaoke mode" and an "auto performance mode," are not described in the original disclosure of the invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1,10,11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsai et al in view of Ochi, and further in view of Akimoto et al.

Tsai et al. (USP 6582235) discloses a musical apparatus which comprises a main body (Fig. 1), a keyboard 4A, synthesizer 7, memory unit 3, display unit 6A, where musical score data (comprising lyrics and chords) are displayed (Fig. 4A). Tsai et al does not explicitly teach the displaying of lyrics contained in the memory unit in a predetermined synchronization with actuation of the keyboard.

Ochi (USP 5315911) discloses a music score display device 17 which comprises the displaying of musical score data contained in the memory unit 15 in a predetermined synchronization with actuation of the keyboard (Fig. 3). It would have been obvious to one of ordinary skill in the art to adapt the teachings of Tsai et al with those of Ochi, so as to allow for automatic display of the musical score, which includes lyrics, with the playing of an instrument by a singer/player.

The Tsai/Ochi combination as described above discloses all features claimed except for the pop-up display, microphone, and recorder. Akimoto et al (USP 6084167) discloses an electronic musical instrument which comprises a pop-up display and microphone (see especially. Figs. 1,5,10,18,19, pop-up screen 80), and recorder (Col. 6, lines 46-56). It would have been obvious to adapt the Tsai/Ochi combination with those of Akimoto et al, as to make the device more portable and conducive to use with a singer, and to allow the singer to record and evaluate the performance at a later date.

With regard to Claim 10, Akimoto et al discloses the configuration of the synthesizer in a karaoke mode (Fig. 10). With regard to Claim 11, Akimoto et al discloses the configuration of the synthesizer in an automatic performance mode (Fig. 7).

In response to applicant's argument that Ochi does not teach a display unit configured to display predetermined lyrics based upon data contained in a memory unit, at a predetermined time relative to actuation of a keyboard, applicant is referred to the Abstract:

> A music score display device has a storage device for storing music score data, a display device for displaying the music score data for each specified section, and a comparator for comparing the musical playing data supplied from a player *(i.e. a keyboard)* with the music score data. The music score display device further has a retrieval device for retrieving a playing position according to the compared result of the comparator, and a display controller for controlling display section of the display device based on the retrieval result of the retrieval device.

Applicant is also referred to the specification that describes the flowchart of Fig. 3, Column 3, lines 14-27.

> Looking at the displayed score, the player starts to play a musical instrument. The note data according to the playing are received through the MIDI interface 16 (n3), the data being stored in to the buffer (n4). Then, whether the written data into the buffer accords with the score data which the song pointer specifies is judged (n5). If "yes", the song pointer is incremented (n6), and therefore, if the finish of all the playing of one line (one step) is judged, a new score is displayed on the same step area (n9). Since the next line of the score has already been displayed on the other step area, the score two lines after is displayed. When the music is finished, the process is ended by judgment of n8.

So, Ochi teaches the display of a musical score on a display unit based upon data contained in a memory unit at a predetermined time relative to actuation of a keyboard. Tsai teaches a display of a musical score combined with a keyboard, and that a musical score comprises lyrics and chord information.

In response to applicant's argument that the examiner has combined an excessive number of references, reliance on a large number of references in a rejection

does not, without more, weigh against the obviousness of the claimed invention. See *In re Gorman*, 933 F.2d 982, 18 USPQ2d 1885 (Fed. Cir. 1991).

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey Donels whose telephone number is 571-272-2061. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on 571-272-2800 ext 37. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jeffrey Donels
Primary Examiner
Art Unit 2837